$$R_3 - R_2 - R_3$$

$$R_3 - R_2 - R_3$$

$$R_3 - R_3 - R_3 - R_3 - R_3$$

or a pharmaceutically acceptable salt thereof, wherein:

$$R_{1}$$
 is a bond - E , - C , - C

$$R_2$$
 is a bond, $-(CY'_2)_n^-$, $-(CY'_2-CY'=CY')_n^-$,

-(CY'2-CY'2-CH=CH) $_n$, -(CY'=CY') $_n$, or -(CY'2-C) $_n$, wherein Y' is hydrogen or an alkyl group and wherein n is 1 to 8; and

 $\rm R_3$ is -Y", -OH, -NH_2, -N^+(Y")_3, -COCH, -COOT, -SO_3H, -SO_3T, -C-PO_3H_2 or -C-PO_3HT, wherein Y" is an alkyl group.

Fig . IA

or a pharmaceutically acceptable salt thereof, wherein:

each R₁' is independently a bond, - Co₂Y' - Co₂Y'

wherein Y" is an alkyl group, and wherein \bigcirc indicates bonding to R_1 ' at any position and indicates bonding to R_2 ' and the R_1 ' phenyl substituent at any position;

each $R_{2}{}^{\prime}$ is independently a bond, or $-(CH_{2})_{\pi}-$ wherein n is 1-4,

each R_3 ' is independently -Y", -Y'", -H, -OH, -OY", -NO₂, -CN, -NH₂, -COOH, -COY", -COOT, or a heterocyclic group, wherein Y" is as defined above and Y'" is a primary, secondary, tertiary or quaternary amine.

Fig. 1C

R₁ through R₈ are, independently. -H. alkyl, 2-hydroxyalkyl, methoxyalkyl, halogen, nitro, cyano, trialkylammonium. formyl, amide of carboxylic acid, alkyl ester of carboxylic acid, carboxylic acid, glucuronyl or glyceryl ester of carboxylic acid, 1,2-dihydroxyalkyl, acetyl, vinyl, glycosyl or, taurate, and

 β . γ and δ are, independently, -H. acetyl, glycyl, benzoate, phenylsulfonate, 2-, or 3-, or 4-N-alkyl-pyridyl, nitrophenyl, halophenyl, methoxyalkyl, halogen, nitro, cyano, trialkylammonium, formyl, amide of carboxylic acid.

Fig ID

or pharmaceutically acceptable salt thereof wherein:

R_i and R_i are the same and are:

R₂ and R₄ are the same and are:

Y is halogen or -CO₂X,

each X is the same or different and is an alkyl and each R_{α} is the same or different (preferably the same) and is H or alkyl.

or pharmaceutically acceptable salt thereof wherein:

```
R<sub>1</sub> and R<sub>3</sub> are, independently:

-CO<sub>2</sub>C<sub>1-4</sub> alkyl; or

-CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>CX<sub>3</sub>, wherein X is halogen and n = 1 to 3;

R<sub>2</sub> is:

-H

-C<sub>1-4</sub>alkyl

-COOH

-CO<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>CX<sub>3</sub>, wherein X is halogen and n = 1 to 3,

-CON(CH<sub>3</sub>)<sub>2</sub>, or

-CX<sub>3</sub>, wherein X is halogen; and

R<sub>4</sub> is:
```

-H,

 $-C_1$ alkyl

-COOH,

- CO_2C_{1-1} alkyl,

-CO₂(CH₂)_nCX₃, wherein X is halogen and n = 1 to 3,

-CON(CH $_3$) $_2$, or

-CX₃, wherein X is halogen.

Fig 16

I

or

II,

or pharmaceutically acceptable salt thereof, wherein

each R is, independently, a $C_1\text{--}C_8$ alkyl group, and

each P is, independently, an electron withdrawing group or hydrogen.

Figure 2A

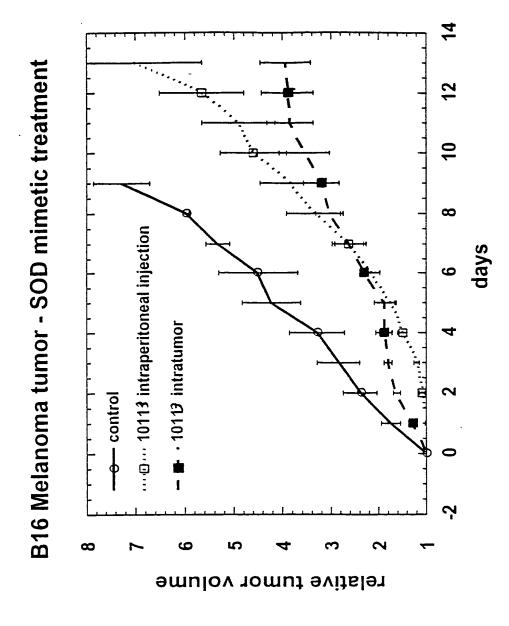
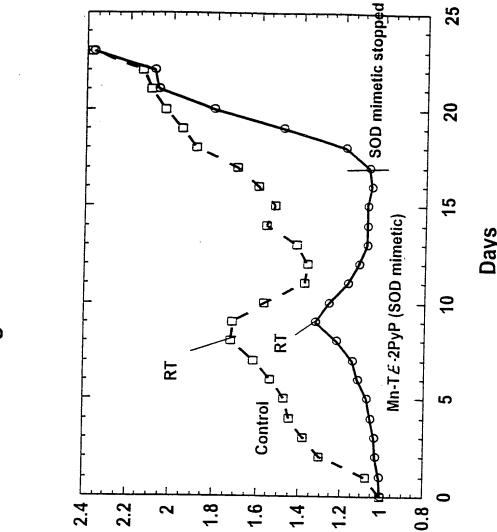


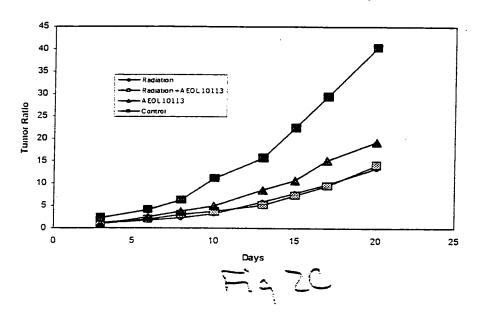
Figure 2B



relative tumor size

25

Effect of Radiation & ABOL 10113 on Mammary Adenocarcinoma



Pigure 3

R3230 AC Mammary Adenocarcinoma in Fisher rats **Tumor Growth Inhibition**

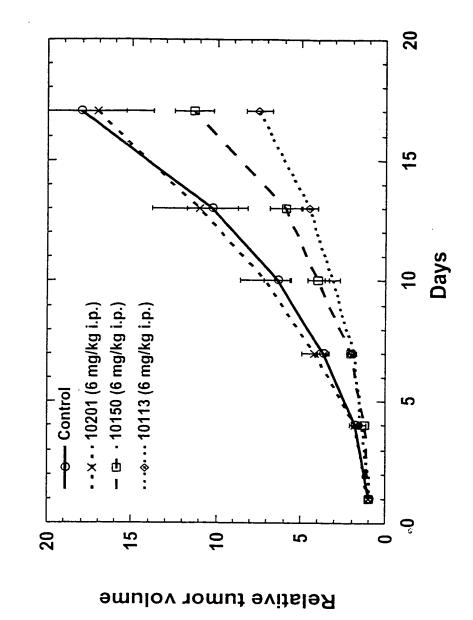
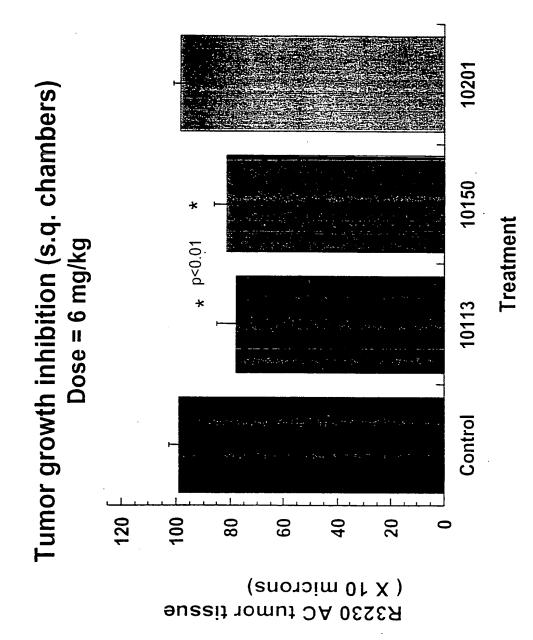
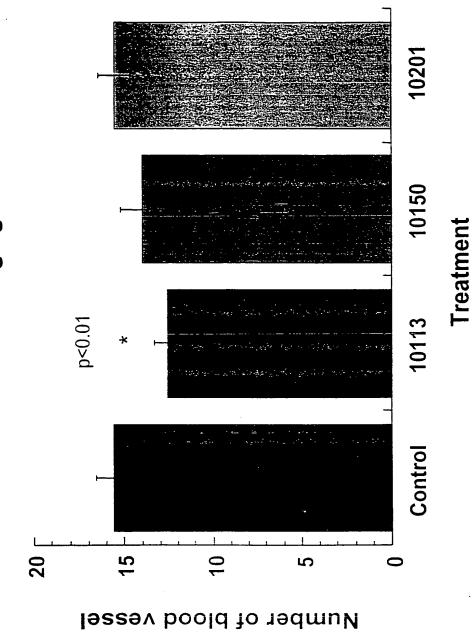


Figure 4



Tumor Angiogenesis Dose = 6 mg/kg



Catalytic Antioxidant Metalloporphyrin [MnTBAP]

Figure 7

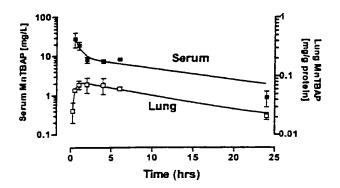
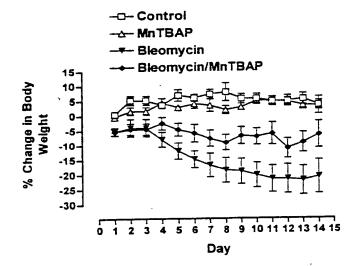
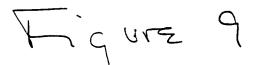
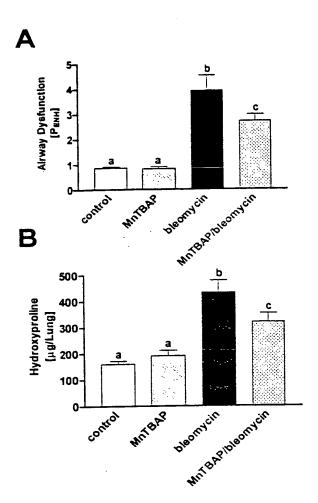


Figure 8

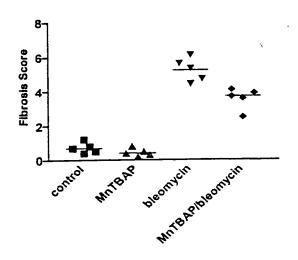






loöslzey oleoz

Figurall



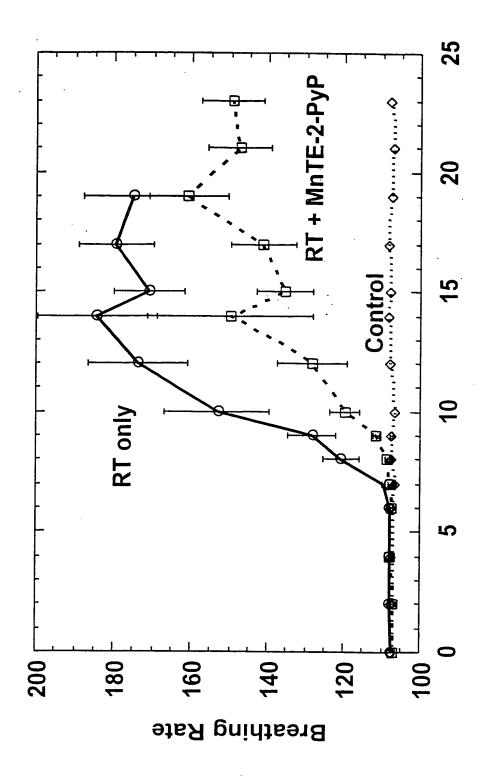


Figure 13A

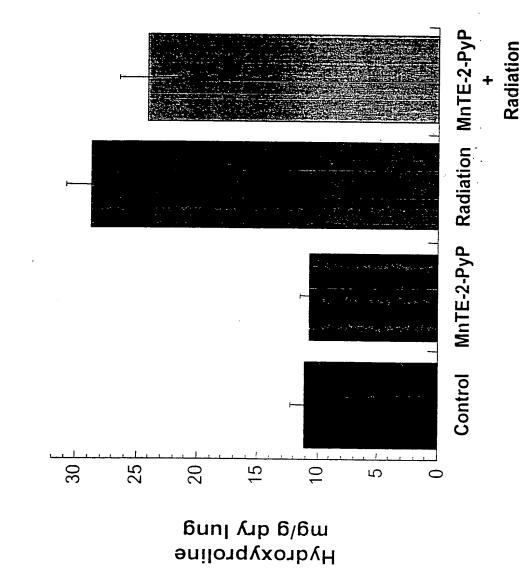


Figure 13B

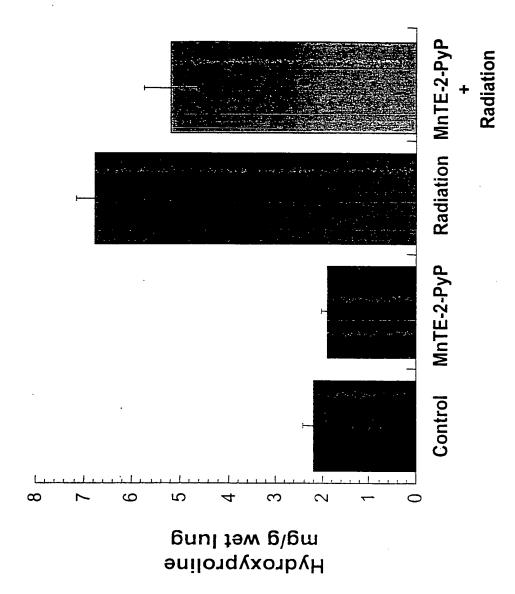


Figure 14

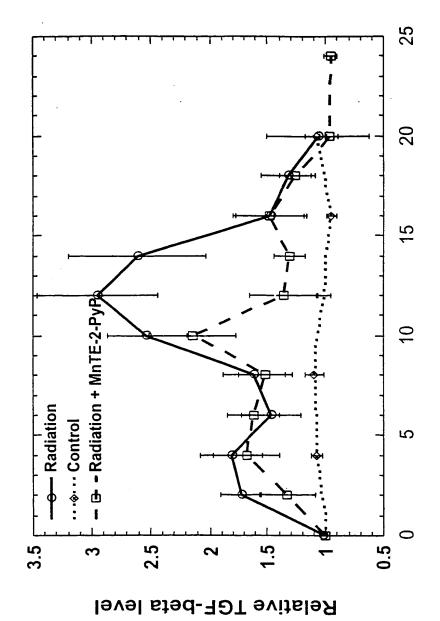
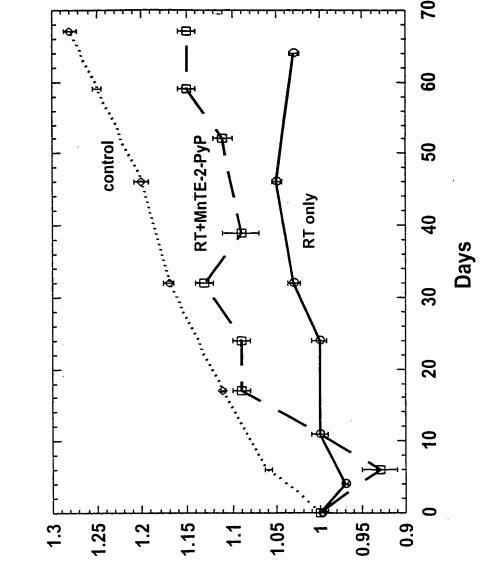


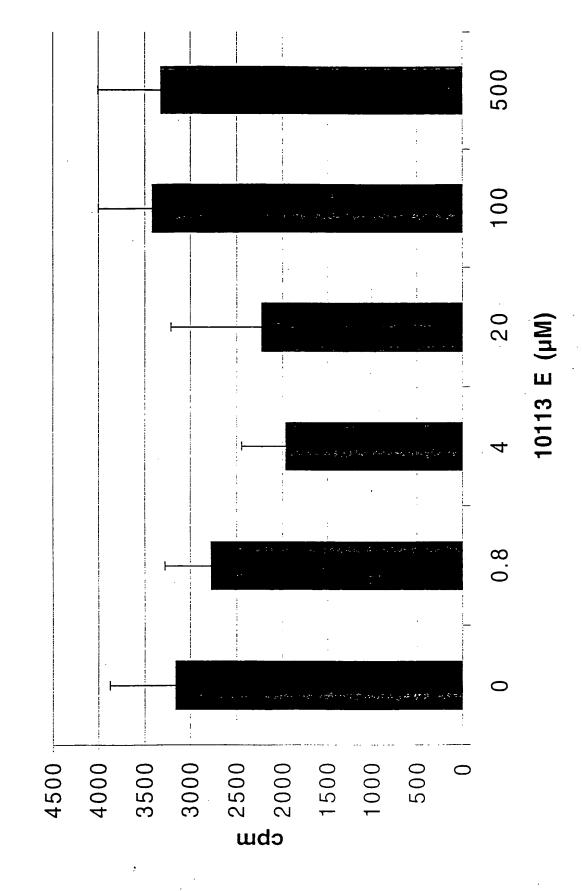
Figure 15



Relative changes in body weight

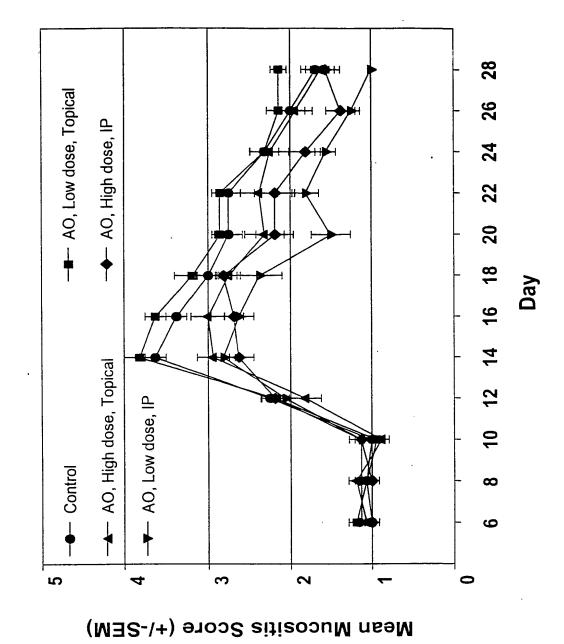
FIGURE 16

A549 3H-Thymidine uptake at 24 hours



<u>\$</u> ZnTBAP (uM) Paraqual (4 mM) Effect of ZnTMPyP on Paraquat-Induced A649 Cell Injury Effect of ZnTBAP on Paraquat-Induced A549 Cell Injury 6 60 ZnTMPyP (uM) Paraqual (4 nM) Basat Zn1BAP 100 (uM) 3 125 8 128 Ş LDH Relesse (U/L) 11 LDH Release (UIL) 8 8 MnTMPyP (uM) Paraquat (4 mM) Paraquat-Induced A549 Cell Injury MnTBAP (100 uM) Paraquat (4 mM) Effect of MnTBAP on Paraquat-Induced A549 Cell Injury Effect of MnTMPyP on Basal Mn IMPyP (100 uld) 125 3 22 3 52 2 20 52 125 ş LDH Release (U/L) LDH Release (U/L) 9 Paraquat-Induced Injury of Human A549 Cells (48 hr) Paraquat (mM) 0 0 J 25 75 20 LDH Release (U/L)

INC-01 Blinded Mucositis Scores



Percentage of Study Days with Ulceration as Indicated by a Score of 3 or Greater

